



Climate Change in sub-Saharan Africa and its Implications for the Work of the Grandmothers Advocacy Network

Drought in sub-Saharan Africa

The drought of 2015/16 in sub-Saharan Africa has been described by many as the worst in 35 years, affecting 18 million people, responsible for states of emergency in seven countries, and resulting in a UN declaration of famine. The drought was triggered by a strong El Niño, aggravated by climate change (UN News Centre 2016). Eleven countries experienced severe droughts, with seven of these countries (Malawi, Zimbabwe, Mozambique, Namibia, Swaziland, Lesotho and Somalia) declaring national emergencies. In July 2016, the UN Secretary General called for emergency food support for sub-Saharan Africa's 18 million people in the region's hardest hit countries: Lesotho, Madagascar, Mozambique, Swaziland, Zambia, Zimbabwe and Malawi. In 2017, the annual short rains have been substantially reduced and it is feared the drought is not over. In March 2017, the UN warned of famine in four countries faced by the drought and concurrent civil conflicts: Kenya, Yemen, South Sudan and Somalia. Famine is a formal declaration meaning people have already started dying of hunger.

In January, the Brookings Institution (2017) released its report, *Foresight Africa*, in which climate change was identified as one of the top 10 issues facing Africa in 2017. In a sample of 30 African countries, two-thirds are warming faster than the world as a whole—a trend expected to continue in coming decades.

The Science

The Intergovernmental Panel on Climate Change (IPCC) is a scientific and intergovernmental body under the auspices of the United Nations, set up at the request of member governments, dedicated to the task of providing the world with an objective, scientific view of climate change and its political and economic impacts. The IPCC published five reports between 1990 and 2014. The most recent 2014 report states:

- High levels of atmospheric carbon dioxide, methane and nitrous oxide associated with economic and population growth are the dominant causes of climate change.
- Surface temperature is projected to continue to rise over the 21st century under all emission scenarios assessed (low, medium and high).
- It is very likely that heat waves will occur more often and last longer, and that extreme precipitation events will become more intense and frequent in many regions. The ocean will continue to warm and acidify, and global mean sea level will continue to rise. (IPCC, 2014)

In November 2016, the World Meteorological Association (the UN weather agency), in an analysis of the global climate, found the five years between 2011 and 2015 to be the hottest on record, with an increasingly human footprint on extreme weather and climate events with dangerous and costly impacts. Climatologists have predicted that climate change in sub-Saharan Africa will be experienced as frequent occurrence of extreme heat events, increasing aridity, and changes in rainfall, with decreases in southern Africa and increases in East Africa. Climate change is expected to affect rains, increase the frequency of droughts, and raise average temperatures, threatening the availability of fresh water for agricultural production and human consumption.

Impacts

Climate change has been identified as one of the greatest challenges of our time, and the associated adverse impacts will undermine the ability of all countries to achieve sustainable development (IPCC, 2014; UN 2030 Sustainable Development

Goals Preamble). Populations currently at risk economically, politically, or otherwise are especially vulnerable to the impacts of climate change. The Canadian International Aid Review (2016) described climate change and environmental degradation as often linked to development challenges, including health, gender equality, peace and security, and as increasing the frequency and scale of environmental migration and displacement. Increasing environmental sustainability is one of Canada's cross-cutting themes for international development. Unless action is taken now to make agriculture more sustainable, productive and resilient, climate change impacts will seriously compromise food production in countries and regions that are already highly food-insecure, and will jeopardize progress toward the key Sustainable Development Goals of ending hunger and poverty by 2030 (FAO, 2016).

The IPCC (2014) predicts that climate change will result in:

- the undermining of food security through the loss of local fisheries, the negative impact on food production, and reduction of renewable water and groundwater resources;
- exacerbation of existing health problems worldwide and increases in ill-health which will be especially seen in developing countries with low income; illnesses such as increased infectious disease due to lack of potable water, and increased vulnerability that comes with malnutrition;
- increased displacement of people with impact especially felt by populations that lack the resources for planned migration; and
- an increase in violent conflicts related to poverty, lack of access to water and food shortages.

Extreme drought often affects women and children most markedly. Zimbabwe is one of the countries most affected by the current drought, and a case in point. Agriculture is a key component of the economy in Zimbabwe. In a good year, it supports the country's grain needs. The drought of 2015/16 produced two consecutive years of failed rains, resulting in more than four million people in need of food aid, and then Cyclone Dineo struck mid-February, with most of the country affected by floods that washed away crops, bridges and roads. Impacts of these drought and flood disruptions have had the greatest impact on women and children due to:

- travelling long distances to find potable water;

- an increase in domestic violence, because men, who typically buy the seeds, expect a good return on their investment;
- lack of access to financing to purchase the necessary seeds and fertilizer to respond to changing growing conditions; and
- a growing number of children leaving school to help their mothers or grandmothers work in the field or look for paid work.

Women are often excluded from education provided by agricultural extension workers regarding adaptation to climate change, in spite of the fact that they do most of the farming. (IRIN News, Part of Series on Climate Change and Food Security, March 2017).

Solutions

There is a need for global cooperation to deal with climate change, essential for the fulfillment of the broader Sustainable Development Goals agenda. Developed countries have set a goal of mobilizing \$100 billion annually by 2020 to address the needs of developing countries in meaningful actions related to the mitigation of climate change (UN Framework Convention on Climate Change). In 2016 the Government of Canada announced an increase of support to initiatives on climate change of \$2.6 billion to help developing countries take climate action, including moving to low carbon economies, sustainably managing and protecting their natural resources, and adapting to the adverse impacts of climate change.

The Food and Agriculture Organization of the United Nations (FAO), in their report “The State of Food and Agriculture - Climate Change, Agriculture and Food Security” (2016) identify the urgent need to support smallholder farmers in adapting to climate change with the introduction of sustainable agricultural practices such as the use of nitrogen-efficient and heat-tolerant crop varieties, zero-tillage and integrated soil fertility management. USC Canada is providing leadership in supporting farmers and communities across Africa in promoting sustainable farming practices with efforts in strengthening soil and water conservation, education and knowledge exchange for local farmers, and participatory action research.

Importance of the Issue for GRAN

While the impacts of climate change are being felt worldwide, the issues in sub-Saharan Africa are much more immediate and pervasive. Older women/grandmothers in rural areas depend on small landholdings and sustainable agriculture products to feed themselves, their families and their communities. Crop failures can be disastrous for these families, and especially for those who are HIV-positive (successful treatment requires adequate nutrition). Climate change, which is negatively affecting agriculture and access to potable water, is a significant factor influencing most facets of reality in an already complex geopolitical environment within which the Grandmothers Advocacy Network plays an important advocacy role.

Recommendations for GRAN:

- Enhance understanding of the impact of climate change on achievement of the Sustainable Development Goals.
- Consider the importance of food security and access to potable water as we pursue all advocacy work, including advocacy related to transmission of infections such as HIV and TB, violence against women, and the challenge of sustaining school attendance.
- Support efforts to enhance formal and informal education for women farmers.
- As a substantial amount of Canadian development assistance has been pledged for climate change mitigation and adaptation, consider how GRAN can impact the focus of these funds to achieve our priorities.

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